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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,566	05/07/2001	Anton Negele	205892USOPCT	1079

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EXAMINER	
REDDICK, MARIE L	

ART UNIT	PAPER NUMBER
1713	11

DATE MAILED: 04/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/830,566	Applicant(s) NEGELE ET AL.	
	Examin r Judy M. Reddick	Art Unit 1713	

-- Th MAILING DATE of this communication app ars on th cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12/19/02;01/16/03* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. *The following is a quotation of the second paragraph of 35 U.S.C. 112:*

> *The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

2. *Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

> *The recited "substantially free of stabilizing inorganic salt" per claims 1 and 5 constitutes indefinite subject matter as per the metes and bounds of "substantially" engendering an indeterminacy in scope, said "substantially" being relative and not absolute. The terminology "substantially free" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention, i.e., the amount of "stabilizing inorganic salt" permitted is not readily ascertainable.*

Claim Rejections - 35 USC § 102

3. *The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:*

> *A person shall be entitled to a patent unless –*
>
> *(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.*

4. *The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary*

skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-7 stand rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Fong et al(U.S. 6,426,383 B1) as per reasons stated in the previous Office Action per paper no.5, 09/12/02, paragraph no. 7. Further, at col. 13, lines 58-65 in the paragraph bridging cols. 13 and 14 and col. 14, lines 13-21, Fong et al teach that the polymerization is conducted in the presence of an initiator selected from compounds which include azo compounds in an amount of about 0.005 to about 10% by weight based on the weight of the ethylenically unsaturated monomer(s) such as vinyl formamide and at temperatures of from about 10 degrees to about 100 degrees C, preferably from about 40 degrees to about 70 degrees C. Fong et al further, @ lines 25 – 47, teaches that in preparing the aqueous polymer dispersion, inorganic salts may be required and if used may be added after the polymerization process has ended which necessarily indicates that a) the inorganic salt is an optional component and b) its use is not limited to insitu polymerization. As to the polymer particle size, Fong et al state(col. 2, lines 6-26) that dispersion polymerization typically yields particle sizes in the region of about 0.1 to 10 microns and sufficient to meet the particle size limitation per claims 1 and 5. Therefore, Fong et al still anticipate the instantly claimed invention with the understanding that the components and process parameters of Fong et al overlap in scope with the claimed components and process parameters and that the inorganic salt is an optional component.

Even if it turn out that the Examiner has somehow missed the boat and the instantly claimed invention is not anticipated, it would have been an obvious expedient, to one of ordinary skill in the art, to omit the inorganic salt along with its function(stability and flowability enhancement of the resulting aqueous polymer dispersion) as provided for under the guise of In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975). Further, it would have been within the purview of the skilled, via routine experimentation and in accordance with property optimization, to control variables such as stabilizer, monomer an initiator concentrations so as to engender polymer particles falling within the scope of the claims.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> *(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.*

7. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong et al(U.S. 6,426,383) in combination with Matsushima et al(U.S. 5,936,042) as per reasons stated in the previous Office action per paper no. 5, 09/12/02, paragraph no. 11. Further, Matsushima et al states @ col. 6, lines 53-66 that 0.1 to 20% by weight of at least one water soluble polymer such as polyvinyl alcohol, polyethylene glycol and polyethyleneimine can be added to the aqueous medium as a dispersant(stabilizer) in the polymerization of compounds such as N-vinylcarboxylic acid amide, alone or in combination with other ethylenically unsaturated compounds, so as to enhance the stability and the flowability of the resulting aqueous polymer dispersion. Therefore, in addition to the rationale set forth in the previous Office action, it is urged that it would have been obvious to the skilled artisan to use at least the polyethyleneimine and/or polyethylene glycol of Matsushima et al, as the dispersant(stabilizer), in the polymerization of the N-vinylformamide and/or N-vinylacetamide per Fong et al, with a reasonable expectation of enhancing the stability and flowability of the resultant aqueous polymer dispersion. Criticality for such, commensurate in scope with the claims, not having been demonstrated on this record.

Response to Arguments

8. Applicant's arguments filed 01/16/03 have been fully considered but they are not persuasive.

> *Relative to Fong et al—The crux of Counsel's arguments appears to hinge on the instantly claimed invention governed by a substantially free content of stabilizing inorganic salt is*

not anticipated by nor obvious over Fong et al which requires a concentration of from about 5 to about 40 wt% of stabilizing inorganic salt. With all due respect to Counsel's opinion, the salt component of Fong et al is an optional component as pointed out in the rejection supra. Further, as pointed out in the rejection supra, even if this turned out not to be the case, it would have been an obvious expedient to one of ordinary skill in the art to omit the inorganic salt along with its function. There is absolutely nothing viable on this record diffusing this issue. Counsel is further reminded that a reference is evaluated, as a whole for what it fairly teaches, i.e., the specification need not contain an example(Run) if the invention is otherwise disclosed in such a manner that one skilled in the art would be able to practice it without undue experimentation as provided for under the guise of In re Borkowski et al, 422 F. 2d 904, 908, 164 USPQ 642, 645(CCPA 1970).

Relative to Fong et al w/Matsushima et al----It is urged and maintained that the instantly claimed invention is obvious within the meaning of 35 USC 103 over Fong et al in combination with Matsushima et al as per reasons clearly stated on the record. It is urged and maintained that it would have been obvious to the skilled artisan to use at least the polyethyleneimine and/or polyethylene glycol of Matsushima et al, as the dispersant(stabilizer), in the polymerization of the N-vinylformamide and/or N-vinylacetamide per Fong et al, with a reasonable expectation of enhancing the stability and flowability of the resultant aqueous polymer dispersion. There is absolutely nothing viable on this record diffusing this issue.

Conclusion

9. The prior art to Bergmeister et al(U.S. 3,817,896) is cited as of interest in teaching stable aqueous copolymer dispersions wherein the copolymer contains, vinyl esters, ethylene and other comonomers such as N-vinylacetamide wherein the copolymer is prepared via emulsion polymerization techniques, in the presence of protective colloids and/or emulsifiers and considered merely cumulative to the prior art supra.

10. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (703)308-4346. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (703)308-2450. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9310 for regular communications and (703)892-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-8183..

Judy M. Reddick

Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR
April 4, 2003